INCH POUND

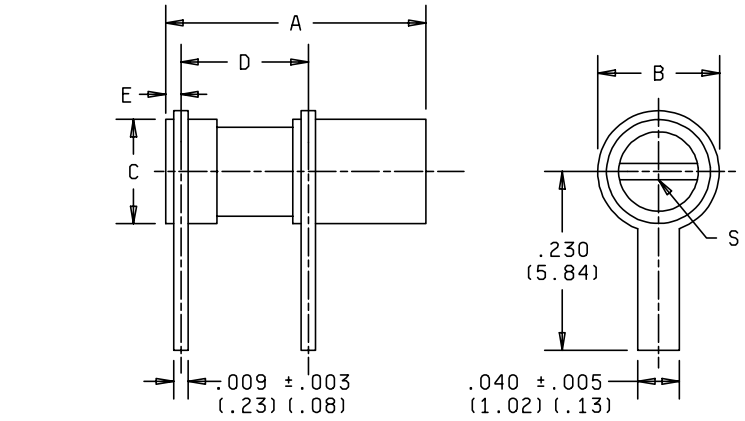
MIL-PRF-14409/16E
25 July 2001
SUPERSEDING
MIL-PRF-14409/16D
27 July 1990

PERFORMANCE SPECIFICATION SHEET

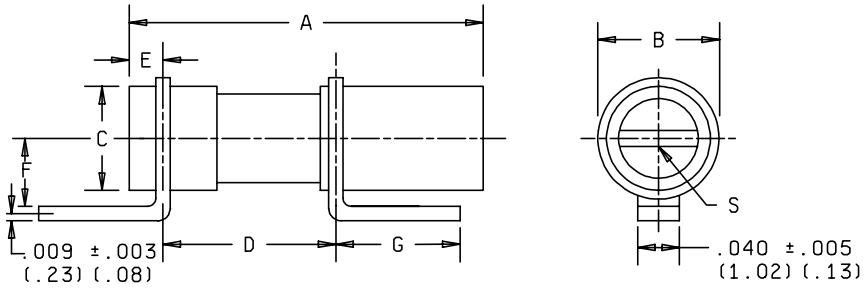
CAPACITORS, VARIABLE (PISTON TYPE,
TUBULAR TRIMMER), STYLES PC21, PC22, PC23, PC24

This specification sheet is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the capacitors described herein shall consist of this document and the latest issue of specification MIL-PRF-14409.

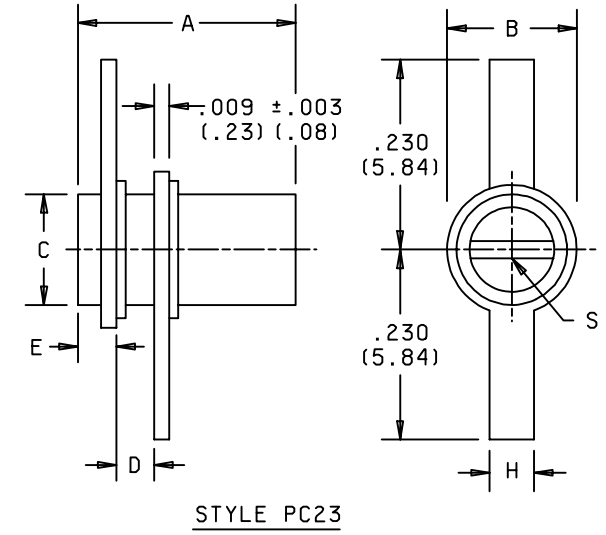


STYLE PC21

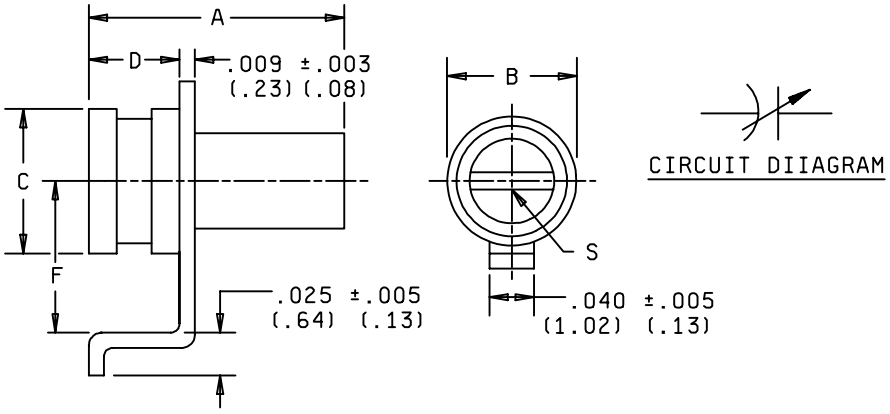


STYLE PC22

FIGURE 1. Dimensions and configuration.



STYLE PC23



STYLE PC24

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Metric equivalents are in parentheses.
4. Unless otherwise specified, tolerance is ±.016 (0.41 mm).

FIGURE 1. Dimensions and configurations - Continued.

TABLE I. Type designation and characteristics.

Type designation	Capacitance range		Q Min	Capacitance drift	Dimensions 1/										
	Min	Max			A (Max)	B (Max)	C ±.005 (0.13)	D ±. .010 (0.25)	E ± .010 (0.25)	F ± .020 (0.51)	G ± .020 (0.51)	H ± .005 (0.13)	S Depth (Min)	S Width ±.005 .005 (0.13)	S Length (Min)
	PF	PF		PF											
PC21J1R2	.3	1.2	5,000	.02	.240 (6.10)	.114 (2.90)	.075 (1.90)	.082 (2.08)	.014 (0.36)	---	---	---	.010 (0.25)	.010 (0.25)	.040 (1.02)
PC21J2R5	.4	2.5	4,000	.02	.280 (7.11)	.158 (4.01)	.118 (3.00)	.082 (2.08)	.014 (0.36)	---	---	---	.010 (0.25)	.015 (0.38)	.070 (1.78)
PC21J4R5	.6	4.5	3,000	.02	.369 (9.37)	.158 (4.01)	.118 (3.00)	.130 (3.30)	.034 (0.86)	---	---	---	.010 (0.25)	.015 (0.25)	.070 (1.78)
PC21K080	.8	8.0	1,500	.04	.566 (14.38)	.158 (4.01)	.118 (3.00)	.250 (6.35)	.036 (0.91)	---	---	---	.010 (0.25)	.015 (0.38)	.070 (1.78)
PC22J1R2	.3	1.2	5,000	.02	.240 (6.10)	.114 (2.90)	.075 (1.90)	.082 (2.08)	.014 (0.36)	.047 (1.19)	.183 (4.65)	---	.010 (0.25)	.010 (0.25)	.040 (1.02)
PC22J2R5	.4	2.5	4,000	.02	.280 (7.11)	.158 (4.01)	.118 (3.00)	.082 (2.08)	.014 (0.36)	.070 (1.78)	.160 (4.06)	---	.010 (0.25)	.015 (0.38)	.070 (1.78)
PC22J4R5	.6	4.5	3,000	.02	.369 (9.37)	.158 (4.01)	.118 (3.00)	.130 (3.30)	.034 (0.86)	.070 (1.78)	.160 (4.06)	---	.010 (0.25)	.015 (0.38)	.070 (1.78)
PC22K080	.8	8.0	1,500	.04	.566 (14.38)	.158 (4.01)	.118 (3.00)	.250 (6.35)	.036 (0.91)	.070 (1.78)	.160 (4.06)	---	.010 (0.25)	.015 (0.38)	.070 (1.78)
PC23J1R2	.3	1.2	5,000	.02	.240 (6.10)	.114 (2.90)	.075 (1.90)	.056 (1.42)	.018 (0.46)	---	---	.040 (1.02)	.010 (0.25)	.010 (0.25)	.040 (1.02)
PC23J2R5	.4	2.5	4,000	.02	.280 (7.11)	.158 (4.01)	.118 (3.00)	.056 (1.42)	.018 (0.46)	---	---	.093 (2.36)	.010 (0.25)	.015 (0.38)	.070 (1.78)
PC23J4R5	.6	4.5	3,000	.02	.369 (9.37)	.158 (4.01)	.118 (3.00)	.060 (1.52)	.060 (1.52)	---	---	.093 (2.36)	.010 (0.25)	.015 (0.38)	.070 (1.78)
PC23K080	.8	8.0	1,500	.04	.566 (14.38)	.158 (4.01	.118 (3.00)	.05 (1.3)	.148 (3.76)	---	---	.093 (2.36)	.010 (0.25)	.015 (0.38)	.070 (1.78)
PC24J1R2	.3	1.2	5,000	.02	.240 (6.10)	.114 (2.90)	.075 (1.90)	.09 (2.3)	---	.075 (1.90)	---	---	.010 (0.25)	.010 (0.25)	.040 (1.02)
PC24J2R5	.4	2.5	4,000	.02	.280 (7.11)	.158 (4.01)	.118 (3.00)	.09 (2.3)	---	.110 (2.79)	---	---	.010 (0.25)	.015 (0.38)	.070 (1.78)
PC24J4R5	.6	4.5	3,000	.02	.369 (9.37)	.158 (4.01)	.118 (3.00)	.16 (4.1)	---	.110 (2.79)	---	---	.010 (0.25)	.015 (0.38)	.070 (1.78)
PC24K080	.8	8.0	1,500	.04	.566 (14.38)	.158 (4.01)	.118 (3.00)	.25 (6.4)	---	.110 (2.79)	---	---	.010 (0.25)	.015 (0.38)	.070 (1.78)

1/ Metric equivalents are given for general information only.

REQUIREMENTS:

Dimensions and configuration: See figure 1 and table I.

DC voltage rating: 500 volts.

Dielectric: Alumina or sapphire.

Capacitance range: See table I.

Insulation resistance: Not less than 10^6 megohms at room ambient temperature and not less than 10^5 megohms at +125°C.

Test condition B (500 volts ±10 percent).

Quality factor (Q): See table I (measured at frequency of 250 ±10 MHz).

Driving torque: Greater than or equal to 0.1 and less than or equal to 1.0 ounce-inch from -55°C through +125°C for capacitors with a range of .3 to 1.2 pF. Greater than or equal to 0.2 and less than or equal to 2.0 ounce-inches from -55°C through +125°C for all others.

Temperature coefficient and capacitance drift: J, 0 ±50 ppm/°C or K, 0 ±75 ppm/°C (see table I).

Thermal shock: Method 107 of MIL-STD-202, test condition B.

Immersion: Not applicable.

Marking: Not applicable; package shall be marked with the complete type designation and manufacturer's name or supply code.

Custodians:
Air Force - 11
DLA - CC

Preparing Activity:
DLA - CC

(Project 5910-2111-13)